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ADDITIONS TO THE FAUNA OF TIGER BEETLES OF VIETNAM (COLEOPTERA, CARABIDAE: CICINDELINAE)

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Summary. Additions to the tiger beetle fauna of Vietnam are presented and discussed. *Cylindera* (*Eriodera*) *albopunctata* (Chaudoir, 1852) is recorded from Vietnam for the first time (in Nghe An province). Some new provincial records are also given: five species or subspecies in Quang Nam province, four species in Nghe An province, three species in Bac Giang province, two species each in Cao Bang province and Hanoi Municipality, and one species each in Lao Cai, Quang Ninh, Ha Giang, Binh Phuoc, Hoa Binh and Gia Lai provinces. The main external features, as well as the basic measurements of the males of *Neocollyris* (*Isocollyris*) *convergentefrontalis* (W. Horn, 1923), *Neocollyris (Isocollyris) erichwerneri* Naviaux et Schüle, 2008, and *Neocollyris* (*Pachycollyris*) *pseudocontracta* W. Horn, 1937 are presented for the first time.

Key words: Coleoptera, Carabidae, Cicindelinae, tiger beetles, fauna, new records, southeastern Asia.

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Резюме. Приводятся и обсуждаются дополнения к фауне жуков-скакунов Вьетнама. *Cylindera* (*Eriodera*) *albopunctata* (Chaudoir, 1852) впервые отмечен в фауне Вьетнама (в провинции Нгеан). Отдельные виды впервые отмечены в провинциях: Куангнам – пять видов; Нгеан – четыре вида; Бакзянг – три вида; Каобанг и муниципальном округе Ханой – по два вида в каждой; Лаокай, Куангнинь, Хазянг, Быньфуок, Хоабинь и Зялай – по одному виду в каждой. Впервые иллюстрируются важнейшие черты строения самцов *Neocollyris* (*Isocollyris*) *convergentefrontalis* (W. Horn, 1923), *Neocollyris (Isocollyris) erichwerneri* Naviaux et Schüle, 2008 и *Neocollyris* (*Pachycollyris*) *pseudocontracta* W. Horn, 1937, а также приводятся их основные линейные размеры.

INTRODUCTION

Southeast Asia shows one of the highest levels of Cicindelinae diversity globally, being characterized by high levels of both species richness and endemism. The fauna of tiger beetles

of Southeast Asia amounts to more than 530 species (Cassola & Pearson, 2000), 177 of which are currently known to occur in Vietnam (Wiesner *et al*., 2017). This is thus the richest fauna of Cicindelinae among all regional faunas. Despite this, our knowledge of the faunal composition of tiger beetles in individual provinces or regions of Vietnam is far from complete, some of them still lacking any check-lists of Cicindelinae (Wiesner *et al.*, 2017). Studies of new and some old museum collections, however, constantly reveal new data on the distribution of individual species in Vietnam, some of which are discussed in the present paper.

MATERIAL AND METHODS

The specimens studied below are kept in the public collections of the Zoological Institute of the Russian Academy of Science, St.-Petersburg, Russia (ZISP), of the Moscow State Pedagogical University, Moscow, Russia (MSPU), of the A.N. Severtsov Institute of Ecology & Evolution of the Russian Academy of Sciences, Moscow, Russia (SIEE), and of the Siberian Zoological Museum, Novosibirsk, Russia (SZM).

The measurements were taken using an ocular-micrometer mounted on a Leica M165c (Carl Zeiss) stereoscopic microscope, as follows: TL – total body length with the labrum (from the anterior margin of the labrum to the elytral apex along the suture), BH – body height (in the highest place in lateral aspect); HW – width of head with eyes (in the widest place); LL – length of the labrum with the apical teeth (along midline), LW – width of the labrum (in the widest place), PL – length of the pronotum (along midline), PW – width of the pronotum (in the widest place), EL – length of the elytra (from the base of the scutellum to the apex along the suture), EW – width of the elytra (in the widest place), AL – length of the aedeagus (from the base to the apex).

LIST OF SPECIES

Tricondyla (s. str.) *pulchripes* White, 1844

MATERIAL EXAMINED. **Vietnam:** Cao Bang Prov., Phia Oac Mt, E-slope, h=900 m, 22°37’42’’N 105°54’42’’E, 22.V–6.VI.2018, 2♂, 1♀, leg. A. Abramov (SIEE, MSPU).

NOTES. This species is known from southern China (Wu, 2011), northern and central Vietnam (Wiesner *et al.*, 2017), central and southern Laos (Wiesner & Geiser, 2016), as well as from Cambodia without exact locality (Wiesner & Constant, 2019). Considering that *T. pulchripes* is recorded from the Chinese provinces Yunnan, Guangxi, Hainan, Guangdong, Hong Kong and Fujian (Shook & Wiesner, 2006; Wu, 2011), as well as the Vietnamese provinces Lao Cai, Tuyen Quang, Bac Kan, Thai Nguyen, Lang Son and Bac Giang (Wiesner *et al.*, 2017), its first report from Cao Bang province is hardly surprising.

Tricondyla (s. str.) *deuvei* Naviaux, 2002

MATERIAL EXAMINED. **Vietnam:** Cao Bang Prov., Phia Oac Mt, E-slope, h=900 m, 22°37’42’’N 105°54’42’’E, 22.V–6.VI.2018, 1♂, 3♀, leg. A. Abramov (SIEE, MSPU); Cao Bang Prov., Phia Oac – Phia Den Natn. Park, 22°36’N 105°52’E, h=1600–1800 m, 4.06.2019, 1♀, leg. A. Barkalov (SZM).

NOTES. At present, this Vietnamese endemic species is known to occur only in Lang Son and Vinh Phuc provinces (Naviaux, 2002; Wiesner *et al.*, 2017). The first record of *T. deuvei* in Cao Bang province, which is adjacent to Lang Son province, is thus nothing strange.

***Tricondyla* (s. str.) *mellyi* Chaudoir, 1850**

MATERIAL EXAMINED. **Vietnam:** Quang Nam Prov., Nam Gian distr., Song Than Nat. Park, h=1050 m, 15°33'48''N 107°23'22''E, 23.IV–11.V.2019, 1♂, 1♀, leg. D. Fedorenko (SIEE, MSPU).

NOTES. Up to now this species was known from five Vietnamese regions: Northeast, Northwest, Red River Delta, North Central Coast and Central Highlands (Wiesner *et al.,* 2017). In South Central Coast region (Quang Nam province) *T. mellyi* is recorded for the first time. Because this species is known from neighbouring North Central Coast region (Thua Thien-Hua province) and Central Highlands region (Kon Tum provinces) this record is not unexpected.

***Protocollyris grossepunctata* (W. Horn, 1935)**

MATERIAL EXAMINED. **Vietnam:** Quang Nam Prov., Nam Gian Distr., Song Than Natn. Park, h~1030 m, 15°34'16''N 107°22'44''E, 23.IV–11.V.2019, 1♂, leg. D. Fedorenko (SIEE).

NOTES. This species is known from the Vietnamese provinces Hoa Binh, Phu Tho, Thanh Hoa and Vinh Phuc, as well as from Ha Noi City (Wiesner *et al.*, 2017). Moreover, *P. grossepunctata* has also been found in the Laotian provinces Bolikhamxay, Luang Namtha and Sekong (Wiesner & Geiser, 2016), as well as in the Chinese province Jiangxi (Matalin, 2002). In the Vietnamese province Quang Nam adjacent to the Laotian province Sekong, this species is being recorded for the first time.

***Neocollyris* (*Brachycollyris*) *purpureomaculata borea* Naviaux, 1994**

MATERIAL EXAMINED. **Vietnam:** Nghe An Prov., Que Phong distr., Pu Hoat National park, h = 1340 m, 19°46'12''N 104°48'16''E, 15–27.V.2019, 1♂, leg. D. Fedorenko (MSPU).

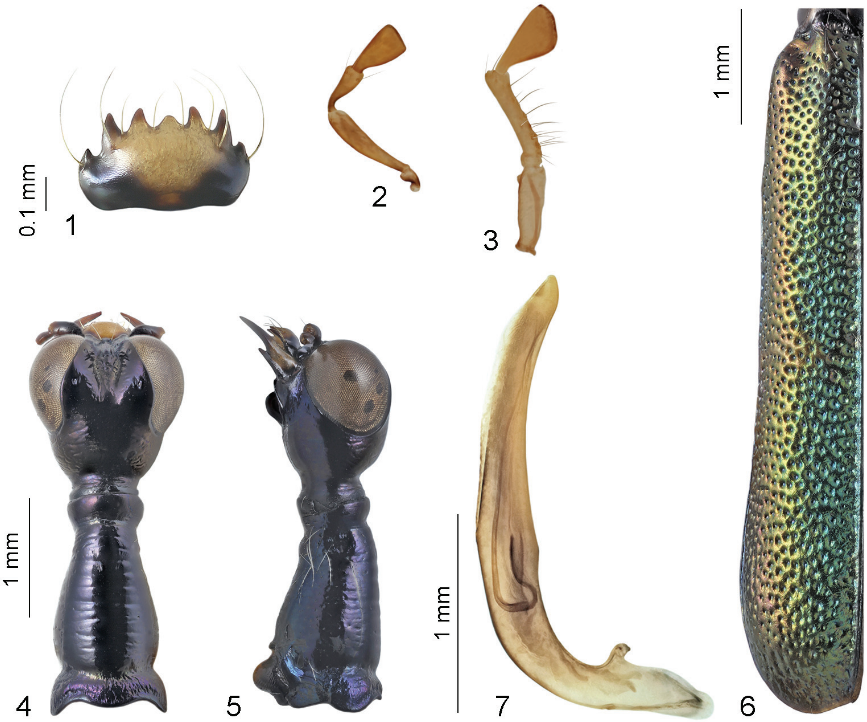
NOTES. This bright subspecies was first recorded from three Vietnamese provinces: Hoa Binh (Northeast region), Tuyen Quang (Northwest region) and Lam Dong (Central Highlands region) only three years ago (Wiesner *et al.*, 2017). In the Vietnamese province Nghe An (North Central Coast region), *N.* (*B.*) *purpureomaculata borea* is being found for the first time. Except Vietnam, this subspecies is known to also occur in the Indian state Meghalaya (Sawada & Wiesner, 1999), the Thai provinces Chiang Mai and Mae Hong Son (Naviaux, 1994a; Naviaux & Pinratana, 2004), the Laotian provinces Champasak, Houaphanh, Louangnahmtha and Phongsaly (Wiesner & Geiser, 2016), as well as the Chinese province Yunnan (Li & Shook, 2008; Wu, 2011).

***Neocollyris* (*Isocollyris*) *convergentefrontalis* (W. Horn, 1923)**
Figs 1–7

MATERIAL EXAMINED. **Vietnam:** Lao Cai Prov., Sa Pa Distr., Fan Si Pan Mts., h = 1400–1500 m, 22°18'56''N 103°49'25''E, 26.V–6.VI.1999, 1♂, leg. N.L. Orlov (ZISP); Lao Cai Prov., Hoang Lien Son Natn. Park, 22.34754°N 103.78049°E, h = 1922 m, 1.V. 2013, 1♂, leg. A. Prosvirov (MSPU).

NOTES. Until now, this species has been known only from the holotype (female), with the label reading *Chapa: Laokay (Haut Tonkin)"* (modern Sa Pa, Lao Cai province of Vietnam), while no male has been properly described yet (Horn, 1923, 1924, 1932; Naviaux,

1994a). The above males have been recorded earlier from Lao Cai province (Wiesner *et al.*, 2017), but their habitus, labrum, labial and maxillary palpi, pronotum, elytra and aedeagus are illustrated here for the first time. The main measurements of these males are as follows: TL = 9.6–10.3 mm *vs.* 11.0 mm in the female; BH = 1.7–1.8 mm; HW = 1.4–1.5 mm; LL = 0.3–0.4 mm; LW = 0.6–0.7 mm (LW/LL = 1.75–2.0); PL = 1.8–2.0 mm; PW = 1.1 mm (PL/PW = 1.64–1.82); EL = 6.1–6.4 mm; EW = 1.8–2.0 mm (EL/EW = 3.05–3.2); AL = 2.2 mm.



Figs 1–7. *Neocollyris* (*Isocollyris*) *convergentefrontalis*, male: 1 – labrum; 2 – maxillary palp; 3 – labial palp; 4 – head and pronotum, top view; 5 – head and pronotum, left lateral view; 6 – left elytron; 7 – aedeagus, left lateral view.

***Neocollyris (Isocollyris) erichwerneri* Naviaux et Schüle, 2008**
Figs 8–14

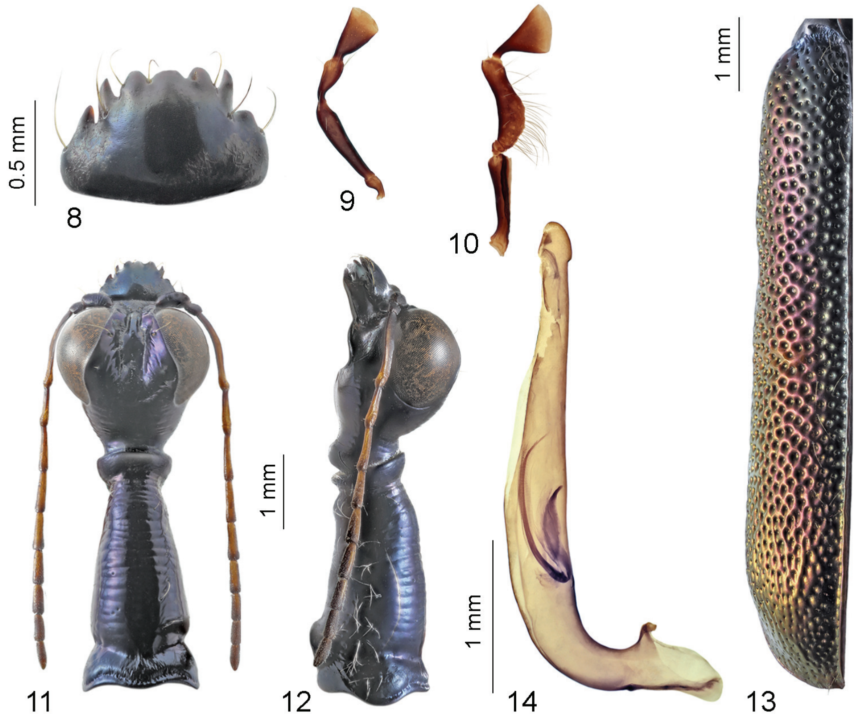
MATERIAL EXAMINED. **Vietnam:** Tam Dao, h=900 m, 30.VI.1963, 1♂, leg. O. Kabakov (ZISP).

NOTES. This Vietnamese endemic species has been described from a single female from Tam Dao (Naviaux & Schüle, 2008). Even though the male of *N.* (*I.*) *erichwerneri* has been already been recorded earlier from Vietnam (Wiesner *et al.*, 2017), its habitus, labrum, labial and maxillary palpi, pronotum, elytra and aedeagus are illustrated here for the first time. The main measurements of male are as follows: TL = 15.0 mm *vs.* 15.8 mm in female; BH = 2.6 mm; HW = 2.1 mm *vs.* 2.0 mm in the female; LL = 0.65 mm; LW = 1.0 mm (LW/LL = 1.54); EW = 3.1 mm *vs.* 3.3 mm in female (EL/EW = 2.94); AL = 3.1 mm.

***Neocollyris* (s. str.) *bonellii bonellii* (Guérin-Méneville, 1834)**

MATERIAL EXAMINED. **Vietnam**: Hoa Binh Prov., Yen Thuy Distr., Lac Thinh, Cuc Phuong Natn. Park, h~300 m, 20º23'N 105º34'E, 1-2.V.2002, 1♀,leg, S. Belokobylskij (ZISP); Quang Ninh, 30 km N Hong Hai, 300 m, 14-20.VI.1962, 2♀, leg. O. Kabakov (ZISP); Ha Giang, Mts W Ha Giang, 800 m, 9.VII.1963, 1♂,1♀, leg. O. Kabakov (ZISP).

NOTES. This is one of the most common species of *Neocollyris* Horn, 1901 widespread both in the mainland and on islands of Southeast Asia (Wiesner, 1992; Naviaux, 1994b). In Vietnam, it has been found in all regions except the South Central Coast and Mekong Delta areas (Wiesner *et al.*, 2017). Despite this, *N. bonellii bonellii* is being recorded from all mentioned above northern Vietnamese provinces for the first time.



Figs 8–14. *Neocollyris (Isocollyris) erichwerneri*, male: 8 – labrum; 9 – maxillary palp; 10 – labial palp; 11 – head and pronotum, top view; 12 – head and pronotum, left lateral view; 13 – left elytron; 14 – aedeagus, left lateral view.

***Neocollyris* (s. str.) *similis* (Lesne, 1891)**

MATERIAL EXAMINED. **Vietnam:** Bac Giang Prov., Song Dong Distr., Thanh Son village, 21º12'N 106º46'E, 25.V.2019, 1♂, leg. A. Barkalov (MSPU).

NOTES. This rare species shows a sporadic distribution within Vietnam, having hitherto been known only from the Northwest (Lao Cai province), Central Highlands (Lam Dong province) and Southeast (Dong Nai province) regions (Wiesner *et al.*, 2017). In the Northeast region (Bac Giang province), *N. similis* is being recorded for the first time.

***Neocollyris* (*Leptocollyris*) *discretegrossesculpta* (Horn, 1942)**

MATERIAL EXAMINED. **Vietnam**: ~45 km W of Hanoi, Ba Vi Natn. Park, leaf litter, h=1050–1100 m, 21°04'N 105°21'38''E, 18.VI.2014, 1♂, leg. D. Fedorenko (MSPU).

NOTES. Up to now, this species has been known to occur in four Vietnamese provinces: Lao Cai, Tuyen Quang (Northeast region), Hoa Binh (Northwest region) and Vinh Phuc (Red River Delta region) (Wiesner *et al.*, 2017). The new record of N. *discretegrossesculpta* from Hanoi Municipality which borders on both Hoa Binh and Vinh Phuc provinces is thus not too strange.

***Neocollyris* (*Stenocollyris*) *signata* (W. Horn, 1902)**

MATERIAL EXAMINED. **Vietnam**: Lao Cai Prov., Sa Pa distr., Fan Si Pan Mt., 1400–1500 m, 22°18'56''N 103°49'35''E, 26.V–6.VI.1999, 1♂, leg. N.L. Orlov (MSPU).

NOTES. This species is known from the Vietnamese provinces Ha Giang, Tuyen Quang, Thai Nguyen, Lang Son (Northeast region), Thua Thien-Hue (North Central Coast region), Kon Tum and Gia Lai (Central Highlands region) (Wiesner *et al.*, 2017). The first record of *N. signata* in Lao Cai province (Northeast region) which is adjacent to Ha Giang province, is thus nothing strange.

***Neocollyris* (*Pachycollyris*) *bicolor* (W. Horn, 1902)**

MATERIAL EXAMINED. **Vietnam**: ~45 km W of Hanoi, Ba Vi Natn. Park, leaf litter, h=1050–1100 m, 21°04'N 105°21'38''E, 18.VI.2014, 1♂, leg. D. Fedorenko (MSPU).

NOTES. Up to now, this species has been known to occur only in two northern Vietnamese regions, i.e. Northeast: Ha Giang, Lang Son and Tuyen Quang provinces, and Northwest: Lai Chau and Lao Cai provinces (Wiesner *et al.*, 2017). In the Red River Delta region (Hanoi Municipality) which borders on the two above regions, *N. bicolor* is being recorded for the first time.

***Neocollyris* (*Pachycollyris*) *biimpressa* (W. Horn, 1937)**

MATERIAL EXAMINED. **Vietnam**: Gia Lai Prov., Buon Loi, 5.VIII.1981, 1♀, leg. L.N. Medvedev (MSPU).

NOTES. This Vietnamese endemic species has been described from Lam Don province (Horn, 1937) and then recorded there again (Wiesner *et al.*, 2017). In Gia Lai province, *N. biimpressa* is being recorded for the first time, this currently representing the northernmost report.

***Neocollyris* (*Pachycollyris*) *mouhotii nagaii* Naviaux et Sawada, 1992**

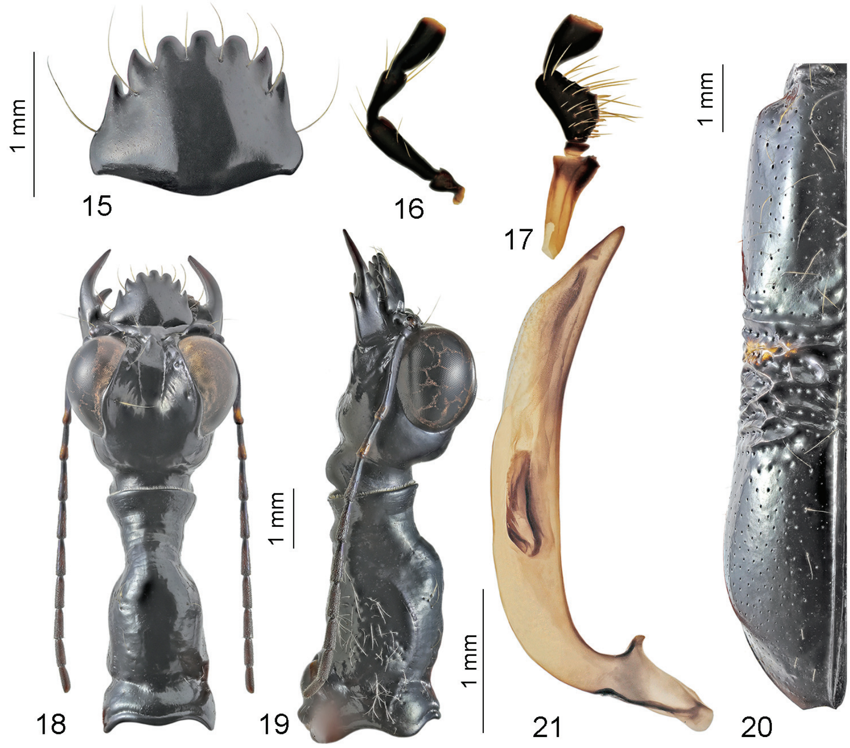
MATERIAL EXAMINED. **Vietnam**: Binh Phuoc Prov., Bu Gia Map Natn. Park, h = 250–540 m, 12°11'37''N 107°12'21''E, 20–21.IV.2009, 1♀, leg. D. Fedorenko (MSPU).

NOTES. This Vietnamese endemic subspecies has been described from Tam Dao (Naviaux & Sawada, 1992) and is presently known to occur in Cao Bang, Lao Cai, Ninh Thuan, Thua Thien-Hue, Tuyen Quang and Vinh Phuc provinces, as well as Hanoi Municipality (Wiesner *et al.*, 2017). In Binh Phuoc, *N. mouhotii nagaii* is being found for the first time. This record is the second within the Southeast region along with the report from Ninh Thuan province (Wiesner *et al.*, 2017).

***Neocollyris* (*Pachycollyris*) *murzini* Naviaux, 1992**

MATERIAL EXAMINED. **Vietnam**: Hoa Binh Prov., Mai Chau Distr., Pa Co, Xa Linh, 20°44'N 104°53'E, 23.IV.2002, 1♂, leg. S. Belokobylskij (MSPU).

NOTES. This species has been described based on a single male (holotype), labelled "*Vietnam, Bako forest, 30 km E Mok Tian, S. Murzin leg., 16-V-1991*" (Naviaux, 1992). In the latest review of the Vietnamese tiger beetles, *N. murzini* has been recorded from Tuyen Quang province for the first time, but its type locality was referred to as being unclear, "*?*" (Wiesner *et al.*, 2017). In reality Pa Co is in Hoa Binh province, placed *ca* 30 km E of Moc Chau (Son La province), being the type locality of *N. murzini* (Sergey Murzin, personal communication). Thus, this Vietnamese endemic species is presently known from the Northeast (Tuyen Quang province) and Northwest (Hoa Binh province) regions of Vietnam.



Figs 15–21. *Neocollyris* (*Pachycollyris*) *pseudocontracta*, male: 15 – labrum; 16 – maxillary palp; 17 – labial palp; 18 – head and pronotum, top view; 19 – head and pronotum, left lateral view; 20 – left elytron; 21 – aedeagus, left lateral view.

***Neocollyris* (*Pachycollyris*) *pseudocontracta* W. Horn, 1937**
Figs 15–21

MATERIAL EXAMINED. **Vietnam:** Lam Dong Prov., 35 km NW of Bao Loc, Loc Bao env., h=650 m, 11°50'12''N 107°38'25''E, 17–22.IV.2012, 1♂, leg. D. Fedorenko (MSPU).

NOTES. This species has been described from two females coming from *"Annam provincia Haut Donai (Agr. Stat. of Blao)*", modern Blao in Lam Dong province of Vietnam (Horn, 1937). Until recently, only females of this rare species were known (Naviaux, 1995), while two males were recorded for the first time only three years ago without any morphological remarks (Wiesner *et al.*, 2017). Thus, the habitus, labrum, labial and maxillary palpi, pronotum and elytra of the male, as well as the aedeagus are illustrated here for the first time. The main measurements of male are as follows: TL = 17.4 mm *vs.* 16.0–17.5 mm in females (Naviaux, 1995); BH = 3.5 mm; HW = 2.9 mm; LL = 1.1 mm; LW = 1.5 mm (LW/LL = 1.36); PL = 4.0 mm; PW = 1.9 mm (PL/PW = 2.11); EL = 9.6 mm; EW = 3.6 mm (EL/EW = 2.67); AL = 3.3 mm.

***Heptodonta ferrarii ferrarii* Gestro, 1893**

MATERIAL EXAMINED. **Vietnam:** Nghe An Prov., Que Phong Distr., Pu Hoat Natn. Park, h = 840 m, 19°45'19''N 104°47'47''E, 18–24.V.2019, 3♂, 4♀, leg. D. Fedorenko (SIEE, MSPU).

NOTES. The nominative subspecies is distributed in eastern Myanmar (Wiesner, 2006), northern, eastern and southern Thailand (Naviaux, 1991; Naviaux & Pinratana, 2004; Matalin, 2015), northern, central and southern Laos (Wiesner & Geiser, 2016), as well as southwestern China (Shook & Wiesner, 2006; Wu, 2011). In Vietnam, it is known to occur in six provinces: Bac Giang, Cao Bang, Lang Son (Northeast region), Hoa Binh, Vinh Phuc (Red River Delta region), and Thua Thien-Hue (south of the North Central Coast region) (Wiesner *et al.*, 2017). In Nghe An province (north of the North Central Coast region), *H. f. ferrarii* is being recorded for the first time.

***Heptodonta pulchella* (Hope, 1831)**

MATERIAL EXAMINED. **Vietnam:** Quang Nam Prov., Nam Gian distr., Song Than Natn. Park, h=1050 m, 15°33'48''N 107°23'22''E, 23.IV–11.V.2019, 2♂, 5♀, leg. D. Fedorenko (SIEE, MSPU).

NOTES. Up to now, this species has been found to occur in five Vietnamese regions: Northeast (Cao Bang, Lang Son, Bac Giang, Phu Tho provinces), Northwest (Hoa Binh province), Red River Delta (Vinh Phuc province), North Central Coast (Thua Thien-Hue province) and Central Highlands (Kon Tum and Lam Dong provinces) (Wiesner *et al.*, 2017). In the South Central Coast region (Quang Nam province), *H. pulchella* is being recorded for the first time. However, since *H. pulchella* occurs in the neighboring provinces Thua Thien-Hue and Kon Tum, this record is hardly surprising.

***Cosmodela duponti duponti* (Dejean, 1826)**

MATERIAL EXAMINED. **Vietnam:** Quang Nam Prov., Nam Gian Distr., Song Than Natn. Park, h=1050 m, 15°33'48''N 107°23'22''E, at light, 23.IV–11.V.2019, 3♂, 2♀, leg. D. Fedorenko (SIEE, MSPU).

NOTES. This species is widespread in southeastern Asia (Wiesner, 1992), in Vietnam found in the Northeast, Central and Southern regions (Wiesner *et al.*, 2017). Despite this, *C. duponti duponti* is being recorded from Quang Nam province (South Central Coast region) for the first time.

***Cosmodela separata* (Fleutiaux, 1893)**

MATERIAL EXAMINED. **Vietnam:** Bac Giang Prov., Song Dong Distr., Thanh Son village, 21°12'N 106°46'E, 21.V.2019, 1♀, leg. A. Barkalov (MSPU).

NOTES. At present, this species is known to occur in Vietnam's Northwest region: Bac Kan, Ha Giang and Lao Cai provinces (Wiesner *et al.*, 2017), as well as southwestern China: Anhui, Fujian, Henan, Hubei, Hunan, Jiangsu, Shanghai, Shanxi, Yunnan and Zhejiang provinces (Puchkov & Matalin, 2003, 2017; Shook & Wiesner, 2006; Wu, 2011). The first record of *C. separata* from the Vietnamese province Bac Giang (Northwest region) is the southernmost.

***Cosmodela virgula* (Fleutiaux, 1893)**

MATERIAL EXAMINED. **Vietnam:** Nghe An Prov., Que Phong Distr., Pu Hoat Natn. Park, h = 840 m, 19°45'19''N 104°47'47''E, at light, 16–18.V.2019, 7♂, 7♀, leg. D. Fedorenko (SIEE, MSPU).

NOTES. This species is distributed in northern India, Nepal, Bhutan and Bangladesh (Acciavatti & Pearson, 1989), northern and northeastern Myanmar (Wiesner, 2006), northern Thailand (Naviaux, 1991; Naviaux & Pinratana, 2004), northern and central Laos (Wiesner & Geiser, 2016), northern Vietnam (Wiesner *et al.*, 2017), southern and eastern China (Puchkov & Matalin, 2003, 2017; Shook & Wiesner, 2006; Wu, 2011). The new record of *C. virgula* from Nghe An province (Northern Central Coast region) is the southernmost in Vietnam.

***Cylindera* (s. str.) *delavayi* (Fairmaire, 1886)**

MATERIAL EXAMINED. **Vietnam:** Quang Nam Prov., Nam Gian Distr., Song Than Nat. Park, h = 1050 m, 15°33'48''N 107°23'22''E, at light, 23.IV–11.V.2019, 2♂, 6♀, leg. D. Fedorenko (SIEE, MSPU).

NOTES. This species is widespread in southeastern Asia: from the Himalayan Arc (northern Indian states, Nepal, Bhutan northern Myanmar and the Chinese province Xizang), though northern Thailand, Laos and Vietnam, to southern and eastern China (Acciavatti & Pearson, 1989; Wiesner, 1992, 2017; Puchkov & Matalin, 2003, 2017), as well as the southern Laotian province Attapeu (Wiesner & Geiser, 2016) and the Vietnamese Central Highlands region (Wiesner *et al.*, 2017). Nevertheless, *C. delavayi* is being recorded from the Vietnamese Quang Nam province (South Central Coast region) for the first time.

***Cylindera* (*Ifasina*) *viduata* (Fabricius, 1801)**

MATERIAL EXAMINED. **Vietnam:** Bac Giang Prov., Song Dong Distr., Thanh Son village, 21°12'N 106°46'E, 26.V.2019, 1♂, leg. A. Barkalov (SZM).

NOTES. This is one of the most common species of tiger beetles widely distributed in southeastern Asia, both in the mainland from India and Nepal to Vietnam and China, and on the main archipelagos like Sunda Islands, Philippines and New Guinea (Wiesner, 1992). In Vietnam, it is known to occur in all main regions except South Central Coast and Mekong Delta (Wiesner *et al.*, 2017). Nonetheless, *C. viduata* is being recorded from Bac Giang province (Northeast region) for the first time.

***Cylindera* (*Eriodera*) *albopunctata* (Chaudoir, 1852)**

MATERIAL EXAMINED. **Vietnam:** Nghe An Prov., Que Phong Distr., Pu Hoat Natn. Park, at light, 19°45'19''N 104°47'47''E, 15–27.V.2019, 1♀, leg. D. Fedorenko (SIEE).

NOTES. Until now, this species has been known to range from the eastern Hindu Kush – Pakistan: Khyber Pakhtunkhwa (Rafi *et al.*, 2010), the Himalayan region – Nepal (Mandl, 1965; Naviaux, 1985; Probst, 1996; Thapa, 2000), Bhutan (Acciavatti & Pearson, 1989), India:

Arunachal Pradesh, Punjab, Uttar Pradesh, Himachal Pradesh, Western Bengal, Assam, Sikkim (Bates, 1878; Fowler, 1912; Acciavatti & Pearson, 1989), and China: Xizang (Li & Chen, 1993; Hua, 2002), to southern China: Sichuan, Yunnan (Puchkov & Matalin, 2003, 2017; Shook & Wiesner, 2006; Shook & Wu, 2007; Wu, 2011). In the fauna of Vietnam, *C. albopunctata* is being recorded for the first time, this representing the southernmost record.

Naviauxella rufovittata **Cassola et Werner, 1995**

MATERIAL EXAMINED. **Vietnam:** Quang Nam Prov., Nam Gian Distr., Song Than Natn. Park, h = 1050 m, 15°33'48''N 107°23'22''E, at light, 23.IV–11.V.2019, 18♂, 15♀, leg. D. Fedorenko (SIEE, MSPU).

NOTES. This Vietnamese endemic species was described from Lam Dong province (Cassola & Werner, 1995) and then found also in Dong Nai and Gia Lai provinces (Cassola, 2002; Wiesner *et al.*, 2017). The new record of *N. rufovittata* in Quang Nam province is the northernmost.

To summarize, according to the new information presented above, one species of tiger beetles is new to the fauna of Vietnam, as well as some more species or subspecies represent new provincial records, in particular, five species in Quang Nam, four species in Nghe An, three species in Bac Giang province, two species each in Cao Bang province and Hanoi Municipality, and one species each in Lao Cai, Quang Ninh, Ha Giang, Binh Phuoc, Hoa Binh and Gia Lai provinces.

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